

Toastmaster®

INSTRUCTION MANUAL INSTALLATION & OPERATION FOOD WARMERS

Drop-in Model

1503T
1503TD
1503TH
1503TDH
1504
1504D
1506
1506D
1527TH

Built-In Model

1509

Counter Type Models

1511E
1521
1523
1527H
1528
1529



Toastmaster®

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Section I

General Information

Toastmaster electric Food Warmers are designed in three categories; drop-in, built-in or counter units. The chart on page 4 will give the specific model you have as well as provide additional statistical information. All units consist of a stainless steel well or receptacle that is heated by a tubular heating element. They are designed to accommodate standard food inserts and are capable of storing one or more food products. All Toastmaster Food Warmers are designed to be used in either a wet or dry application except for the models 1527H, 1527TH, 1509, and 1509D. These models are for wet application only. Toastmaster Food Warmers may be used as a single unit or banked with other built-in or counter equipment.

Toastmaster Food Warmers are made of the finest material available to provide durability and a safe and trouble-free operation. However, care in operation and cleaning will provide a longer life for your equipment. The exterior case of the counter type units has stainless steel front and sides and aluminized steel on the back. The top case and mounting flange of the drop-in units are made of welded and reinforced stainless steel and the case sides are made of aluminized steel.

All Toastmaster Food Warmers meet the standards of the National Sanitation Foundation and are listed by Underwriters Laboratories, Inc.

Section II

Installation

A. Installing Counter Type Units

Care should be taken while uncrating your new Toastmaster Food Warmer to prevent damage and scratching of the surface. First, open the carton by removing all fastening staples. Remove and discard the internal packing material from the top of the unit. Lift the unit up and out of the carton. Locate any mounting brackets or other loose items and set aside. On counter type units, except for model 1511E and 1527H (refer to chart on page 4 for model numbers) you will find four 4" plastic legs with level adjusting feet. To install these legs, turn the unit on its top or back and screw the legs into the four tapped holes in the bottom. The models 1511E and 1527H have already fixed 1 1/4" adjusting feet installed. Upright the unit on your counter, locate the thermostat control knob on the front panel and set it in the "OFF" position. Note that model 1528 has two controls — they must both be in the "OFF" position before connecting to the electrical power.

Your installer should be aware of your electrical power as all Toastmaster Food Warmers are provided in different voltages. This voltage, either 120, 208 or 240, should have been specified when ordering your unit(s). All counter units are shipped with a factory installed 36" electrical cord and plug (see plug configuration chart on page 4). All Food Warmers are provided in single phase only regardless of voltage.

B. Mounting of Drop-IN Models

Drop-in models of Toastmaster Food Warmer are designed to be mounted in cutouts in your stainless (or wood) counter or cabinet top. Cutouts for the Food Warmers should be made per the enclosed dimensions given for your model. Cutouts for the food well are to be made in the top of the counter and the control panel is to be mounted in the front face of the counter. The controls may be mounted on the wall backsplash but the conduit provided is 48". The control box cannot be further away than 48". Also, be aware that with this installation, the operator would have to reach over the hot food to adjust the controls.

When the required mounting holes have been provided, sit the unit along side the holes. You should provide some protection for your counter top to avoid scratching it. Do not install the food well because the opening in the counter top is required for the control box installation.

Align the control panel front over the hole provided and align the bolt holes. Secure it with four #8 sheet metal screws provided by the installer. Place the control box down through the top opening and align it with the control panel front. Reinstall the hex head bolts to secure the front to the box. Replace the recessed cup and secure with the screws removed earlier. Replace the control knob.

A water tight seal is required when installing the food well to the counter top. Lay a bead of silastic sealer (supplied by installer) around the flange of the food well. Allow the silastic to cure for 1 hour before installing. Note that the application of the silastic is easier if the unit is turned upside down on the counter.

After the sealer has cured for about an hour, turn the unit over, align the mounting holes where applicable and insert the food warmer into the counter.

Securing the unit to the counter varies with different models. For 1504, 1506 and 1527, use the six flat washers and six #10-32 nuts furnished. For 1509 series, use the four brackets and four nuts provided. Take note that the turned down edge of the brackets are different lengths. The longest edge of the brackets should be positioned against the bottom edge of the counter and the other edge next to the body of the food warmer. 1503T series warmers are secured to the

counter with mounting brackets that completely surround the lower edge of the mounting flange. Again, these brackets have a long and a short edge. As before, the long edge goes against the counter and the short edge against the food warmer. All four pieces of the mounting brackets are secured with the fourteen nuts provided.

Wipe up any excess silastic that oozes out around the flange when the food warmer is tightened securely.

C. Drains

Certain models of Toastmaster Food Warmers are designed with a drain outlet. Refer to the chart on page 4 to determine if your model is equipped with a drain. If so, it will be necessary for your installing contractor to provide a suitable drain connection which should be equipped with a shut-off valve. No drain is necessary if you plan to use your food warmer as a dry application exclusively, if so, the drain can be capped with a simple plumbing pipe cap. Remember, the model 1527TH and 1509 are designed for wet application ONLY. Caution should be used when affixing plumbing connections to food warmers equipped with drains. Over tightening may result in damage to the silver solder where the drain pipe attaches to the bottom of the food warmer.

D. Installing Drop-In Units

The drop-in models are equipped with a wiring connection from the basic unit to the switch control panel to permit remote installation. This wiring connection is enclosed in flexible conduit. All Food Warmers have a 48" wire connection and conduit. Drop-in models are furnished with power supply lead wires for ease of installation. All models have knob nuts in the control box to allow for ease in running a 1/2" conduit from the control box to your electrical power source. The ground lug is mounted inside the control box. It is not necessary to disconnect any of the pre-wired, internal wiring of these units to complete the installation.

Section III

Operation

A. Controls

Controls for Food Warmers vary for different models and the features or intended use of it. A food warmer doesn't require extensive operator interface but the following information should be made available to them. Some of the Food Warmers use a positive off position on the thermostat. This is used to turn the unit off when not in use. When the unit is on the full range of temperatures described are available for operating. All the temperatures given are in Fahrenheit.

Models 1509 and 1509D have a thermostat with a temperature range of 100 to 200 degrees with a positive off position.

Model 1511E has one control to operate both food wells. It has a range of 150 to 200 degrees with a positive off position.

Model 1527H, Heat N' Hold has a temperature range of 90 to 210 degrees with a positive off position.

Model 1529 has an operator control for on and off only. The unit will always operate at the same temperature. This unit does use a low water alarm to alert the operator to add water.

All the other models of Food Warmers use an eight position control including a positive off position.

B. Initial Start Up

If the installation information has been followed, your food warmer is now ready for operation. Before use, make the following check:

1. Turn control knob to "OFF" position.
2. Turn on main electrical disconnect.
3. Turn control knob to highest setting.
4. Check to see if unit is heating (heating light should be lit).

If the unit fails to heat, recheck the main disconnect and the food warmer control to see if they are on. Have the installer recheck all electrical connections. If service is needed, refer to the service agency listing on pages 11-13.

C. Normal Operation (all models except 1527H and 1527TH)

Be sure the control knob is set in the "OFF" position, then energize the unit at the main disconnect. For wet applications fill the unit with approximately 1" of HOT water and turn the control knob dial to the high position for 25 to 30 minutes. After 30 minutes, set the control knob at the desired setting. Always keep insert pans in place or cover the unit to conserve heat and to prevent water evaporation. Most units should operate approximately 24 hours before the need to add water. You should maintain at least a 3/4" water level. Remember, never place food items directly in the receptacle without the use of the insert pan(s). For dry applications, merely set the insert vessel into the food warmer.

D. Models 1527H & 1527TH "Heat N' Hold"

As mentioned earlier these models only require approximately 18 minutes to

heat the water and the food in the insert pan. This model is designed for the purpose of heating the food and then holding it at the serving temperature you desire. Fill the warming unit with about 2½ quarts of water. Place food in the Heat N' Hold and turn control knob to high. The amber light cycles on and off with the heater. After approximately 18 minutes turn the control knob to a minimum of 150° F for holding. Always keep the heating element covered with water to insure proper heat transfer. "Dry" running of the unit will substantially lower the temperature in the insert pan. Check the water level daily. Do not overfill or the water will boil and splash out over the side. Never place food products directly in the warmer well. Common uses of the "Heat N' Hold" units are soup, chili, hot chocolate or vegetables. Thicker foods, such as chili or hot chocolate will heat faster if stirred occasionally during the heating process.

E. Operating Hints

Operating hints include the following. Using these hints will allow you to achieve the best performance and most economical operation for your Food Warmer. When operating wet, always use hot or warm water to speed up the preheat time. Do not use too much or too little water. Too little water will hinder the heat transfer required to maintain the food temperature where too much water will tend to spill out over the top of the food well. Keep the cover on the food insert pan and the entire food well as much as possible to avoid lost heat. Always set the controls to the off position when the unit is not preheating or in use.

Section IV

Always unplug or disconnect the power to the unit before cleaning.

A. Cleaning

(See separate section for cleaning 1527H & 1527TH).

Food warmers should be cleaned frequently to remove scale and prevent build up. Vinegar and water or a commercial de-scaling agent may be used. We recommend the food warmers be emptied daily and washed with soapy water, rinsed and wiped dry. Extreme care should be taken while cleaning so that the electrical components do not get wet. Never submerge the unit in water.

B. Cleaning the 1527H & 1527TH "Heat N' Hold" Units

All Toastmaster food warmers are equipped with an infinite switch control except the 1527H & 1527TH "Heat N' Hold" units. These models have a thermostat control mounted in the well, clamped to the underside of the heating element. Extreme care is necessary when cleaning not to damage the thermostat bulb.

Wipe the well daily. Wash or scour with a mild abrasive. Do not use steel wool for cleaning as it could scratch the surface and cause the unit to rust. To remove scale caused by hard water, soak with vinegar and water or a commercial de-scaling agent that is safe with copper. The thermostat bulb and capillary tube have a copper content.

Accessories

1503TK	Adaptor kit for mounting into wooden counter top. Models 1503 series, 1504 series, 1506 series.
ACRG7	Adaptor ring for 7 qt. pan. Models 1527TH and 1527H
ACRG11	Adaptor ring for 11 qt. pan. Models 1527TH and 1527H
4L4	Accessory legs, 4" steel, set of four, NSF approved. Models 1521 series, 1523 series, 1528

Food Warmers: Drop In

Model No.	Size	Drain	KW Rating	Width	Depth	Inside Diameter	Ship. Wt (Lbs.)	Wet & Dry
1503T	32 Qt.	No	1.0	14 1/2	22 1/2		40	Both
1503TD	32 Qt.	Yes	1.0	14 1/2	22 1/2		40	Both
1503TH	32 Qt.	No	1.6	14 1/2	22 1/2		40	Both
1503TDH	32 Qt.	Yes	1.6	14 1/2	22 1/2		40	Both
1504	7 Qt. Rd.	No	.5			8 1/4" Nominal	11	Both
1504D	7 Qt. Rd.	Yes	.5			8 1/4" Nominal	12	Both
1506	11 Qt. Rd.	No	.5			10 1/8" Nominal	12	Both
1506D	11 Qt. Rd.	Yes	.5			10 1/8" Nominal	13	Both
1527TH	11 Qt. Rd.	Yes	1.65			10 1/8" Nominal	12	Wet Only
1509		No	.4	5 9/16	19 7/8		20	Wet Only
1509D		Yes	.4	5 9/16	19 7/8		20	Wet Only

Counter Type

Model No.	KW Rating	Number Wells	Liquid Capacity	Width (Inches)	Depth (Inches)	Ship. Wt. (Lbs.)	Wet & Dry
1511E	.45	2	4 Qts. Ea. Well	9 5/16	18 3/4	32	Both
1521	1.0	1	32 Qts.	22 1/2	19	43	Both
1523	1.0	1	32 Qts.	14 1/2	25	40	Both
1527H	1.65	1	11 Qts. Rd.	13	13 3/4	16	Wet only
1528	1.0	2	7 Qts. Ea. Well	15	25	45	Both

Electrical Plug Configuration Chart

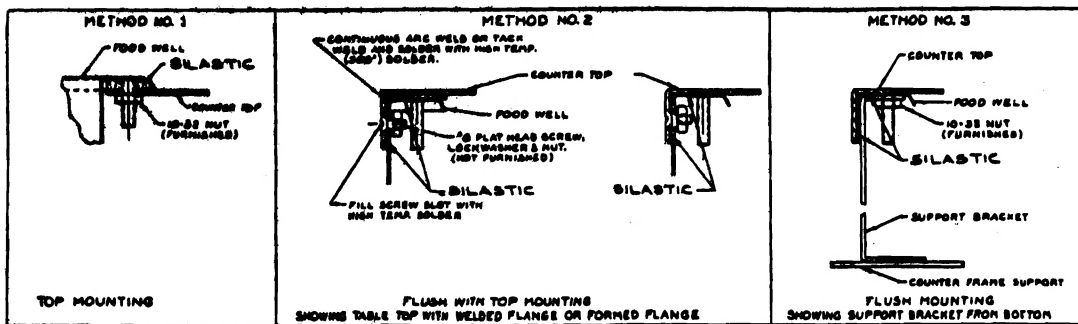
Model	Voltage	Plug	Model	Voltage	Plug
1511E	120	NEMA 5-15P	1523	120	NEMA 5-15P
1511E	208	NEMA 6-15P	1523	208	NEMA 6-15P
1511E	240	NEMA 6-15P	1523	240	NEMA 6-15P
1521	120	NEMA 5-15P	1527TH	120	NEMA 5-15P
1521	208	NEMA 6-15P	1528	120	NEMA 5-15P
1521	240	NEMA 6-15P	1528	208	NEMA 6-15P
			1528	240	NEMA 6-15P



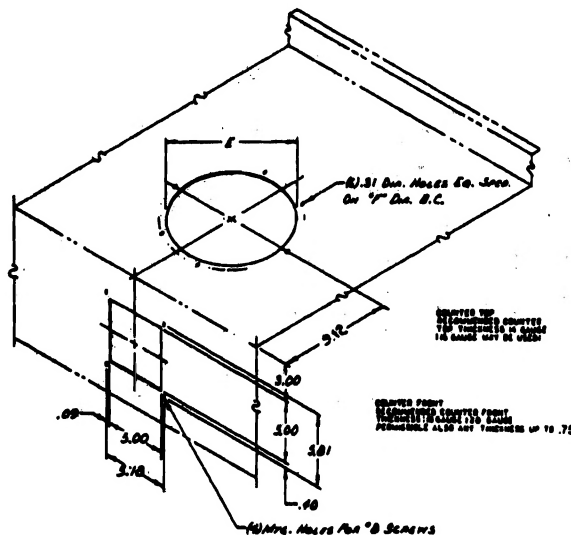
NEMA 5-15P



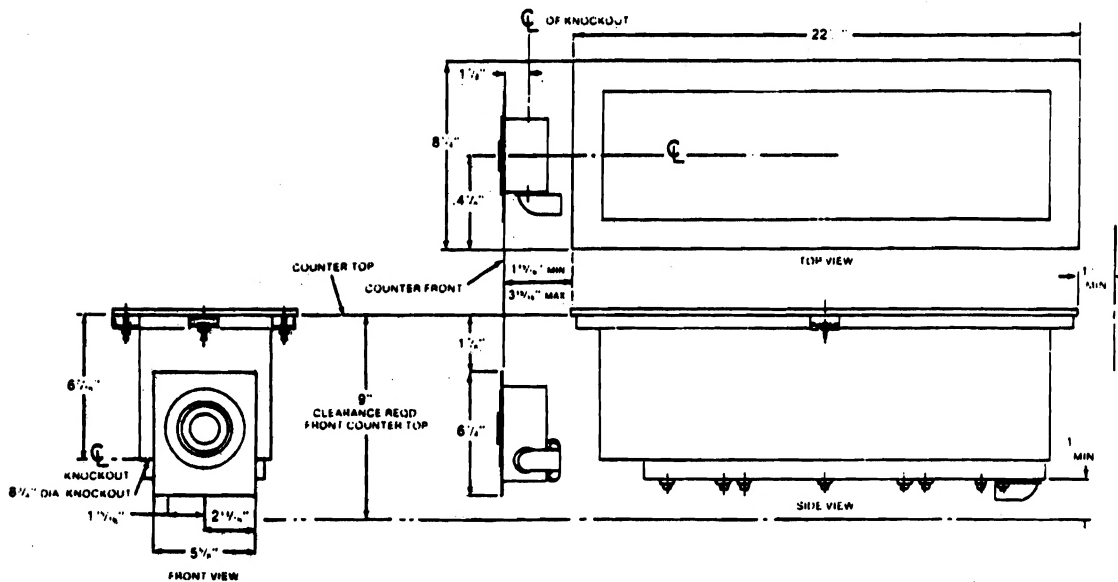
NEMA 6-15P



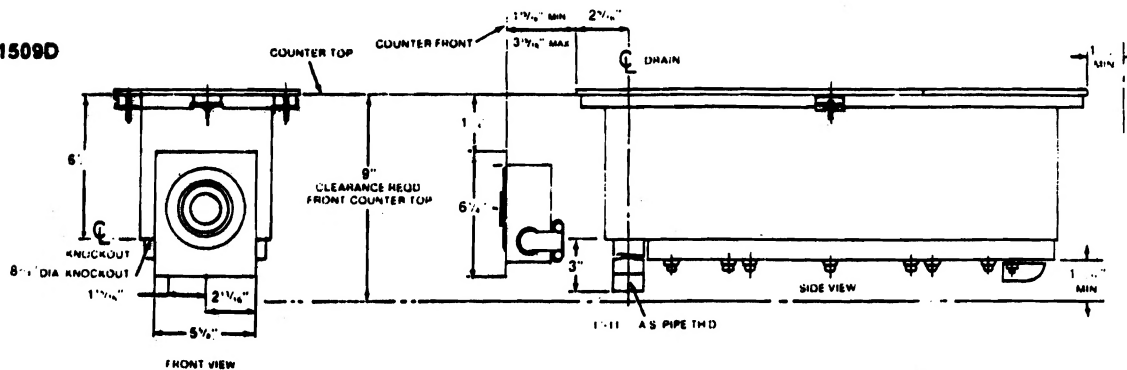
MODEL NO.	F	P
1504	8.88	9.44
1506	10.75	11.31
1527P	10.75	11.31



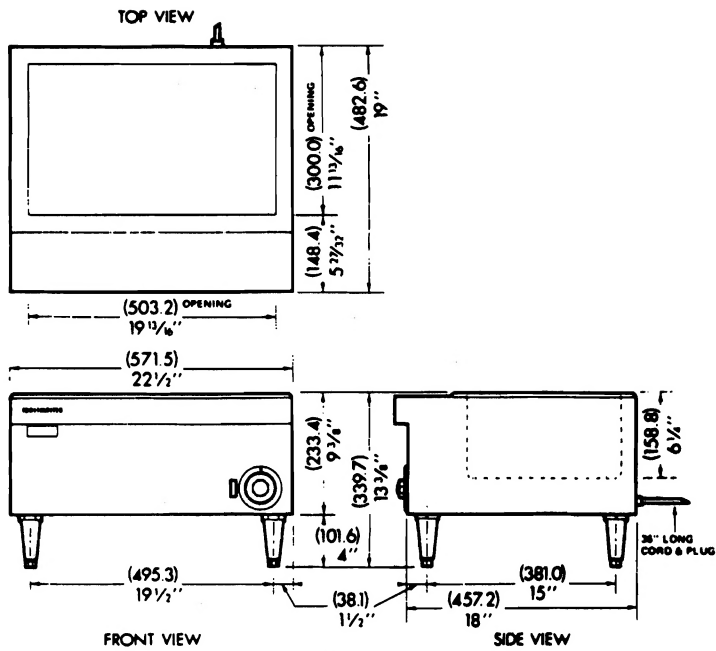
1509



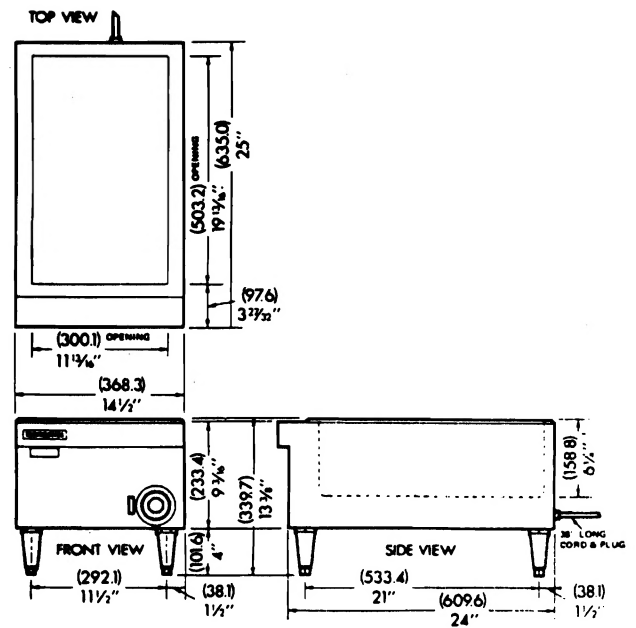
1509D



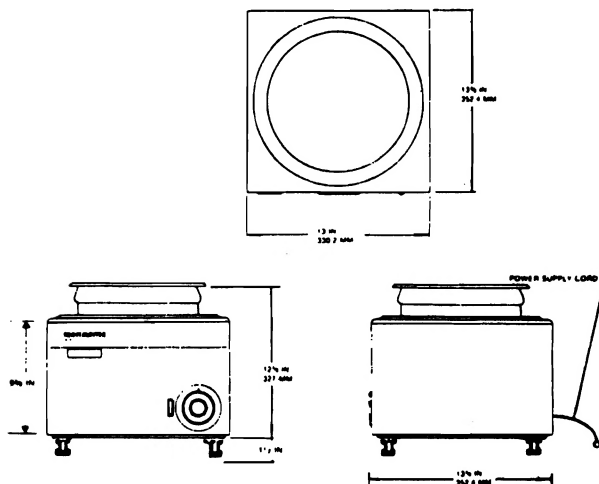
MODEL 1521



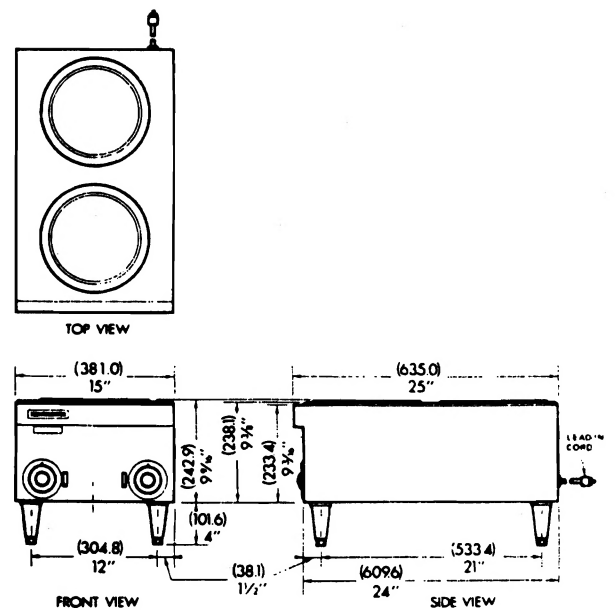
MODEL 1523



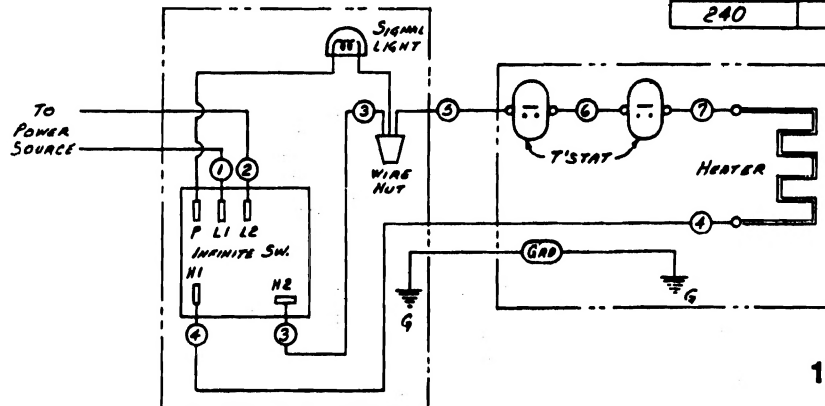
MODEL 1527H



MODEL 1528

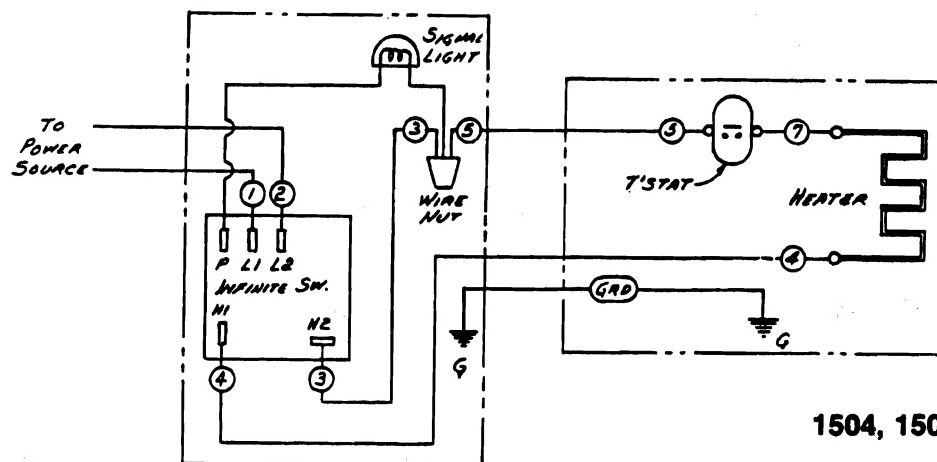


VOLTS	WATTS	AMPS
120	1600	13.33
208	"	7.62
240	"	6.66
120	1000	8.33
208	"	4.81
240	"	4.17



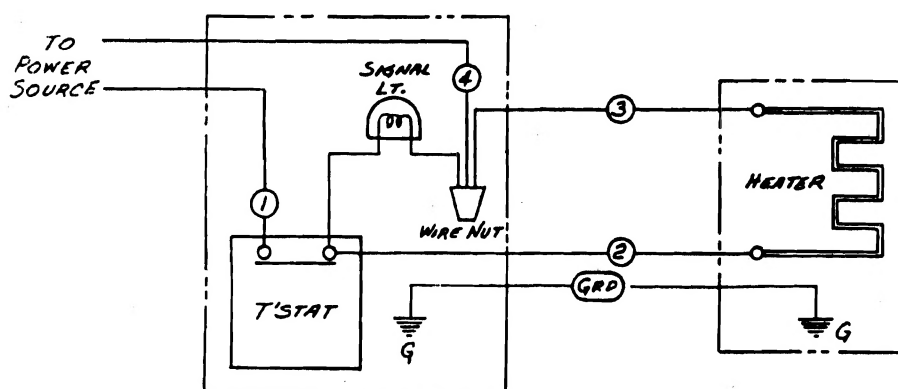
1503

VOLTS	WATTS	AMPS
120	500	4.17
208	"	2.47
240	"	2.08



1504, 1506

MODEL	VOLTS	WATTS	AMPS
1509	120	400	3.33
1527	120	1650	13.7



1509, 1527

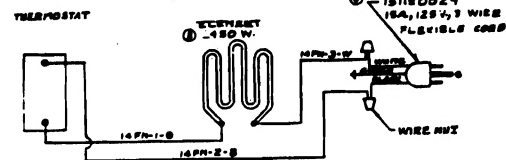
[illegible]

Diagram illustrating the wiring for a 125V electric heating system, including components like the thermostat, heating unit, infinite switch, and signal light.

WIRE SIZE

- 14 FNC-W
- 14 FNC-B

WIRE MATERIAL

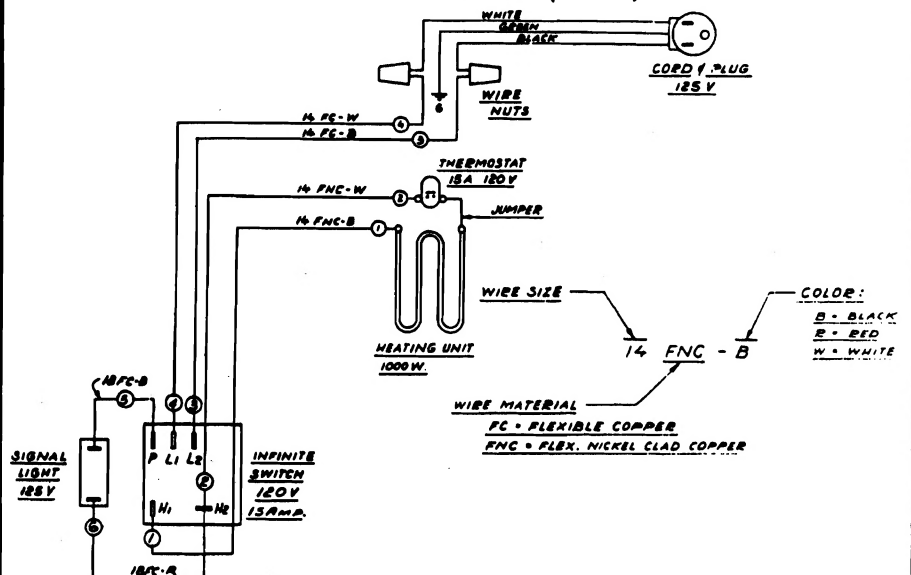
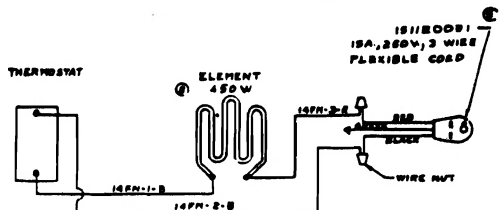
- FC = FLEXIBLE COPPER
- FNC = FLEX. NICKEL CLAD COPPER

COLOR:

- B = BLACK
- R = RED
- W = WHITE

COMPONENTS:

- CORD PLUG 125V
- WHITE GREEN BLACK
- WIRE NUTS
- THERMOSTAT 18A 120V
- JUMPER
- HEATING UNIT 1000W
- INFINITE SWITCH 120V 15Amp
- SIGNAL LIGHT 125V

[illegible]

RED
BLACK

CORD & PLUG
250 V

WIRE
NUTS

14 FNC-B
14 FNC-B

THERMOSTAT
10A 250V

JUMPER

14 FNC-B
14 FNC-B

HEATING UNIT
1000W

10FNC-B

SIGNAL
LIGHT
250V

10FNC-B

14 FNC-B

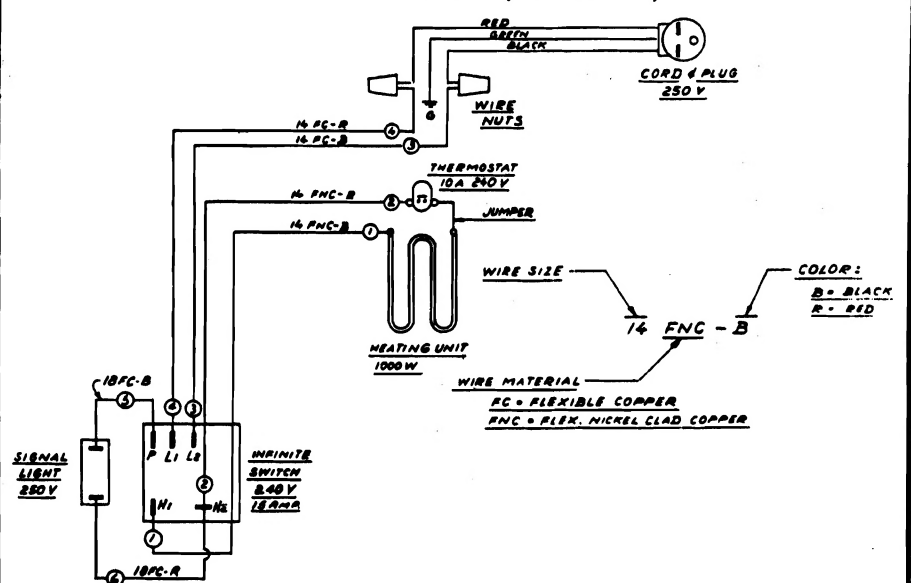
WIRE SIZE

WIRE MATERIAL

FC = FLEXIBLE COPPER
FNC = FLEX. NICKEL CLAD COPPER

COLOR:
B = BLACK
R = RED

MINUTE
SWITCH
5.40 V
15.2MM



WHITE

BLACK

GREEN

GROUND

WIRE NUT

14 FHC-W

14 FHC-B

16 FC-W

16 FC-B

12V-B

REAR SW.

FRONT SW.

REAR UNIT 300 W.

FRONT UNIT 300 W.

THERMO.

THERMO.

VIEWED FROM BOTTOM

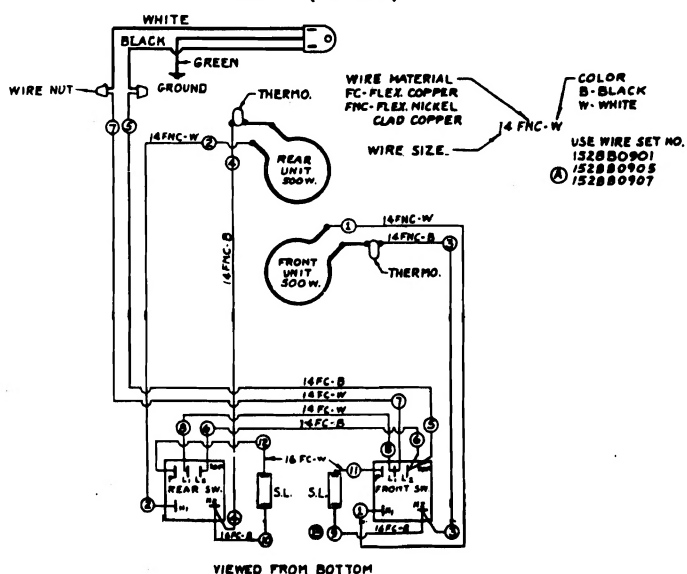
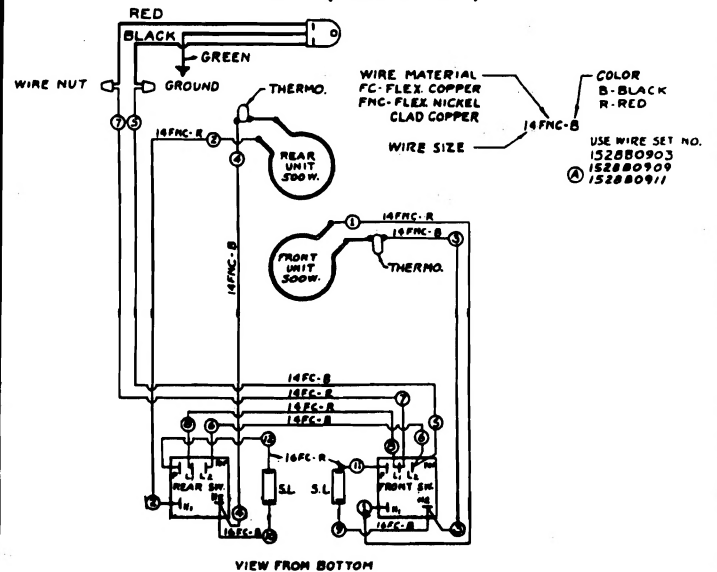
WIRE MATERIAL
FC-FLEX COPPER
FHC-FLEX NICKEL
GLAD COPPER

WIRE SIZE.

14 FHC-W

COLOR
B-BLACK
W-WHITE

USE WIRE SET NO.
1528 B0901
1528 B0905
1528 B0907

[illegible]

INSTALLATION AND OPERATION INSTRUCTIONS

TOASTMASTER

FOOD WARMER

MODEL 1529

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TOASTMASTER FOOD WARMER, MODEL 1529

SECTION I

GENERAL INFORMATION AND DESCRIPTION

The Toastmaster model 1529 food warmer is an electrically heated device with a stainless steel body and well. It is equipped with a pre-set thermostat, "on-off" switch and "dry receptacle" alarm. It is designed to be operated with a volume of hot water in the well and insert pans of food set into that water.

SECTION II

INSTALLATION

Uncrating (1)

Use extreme caution to avoid marring the finish or damaging the unit, it's controls or cord.

- a) Completely remove all staples from the carton's top closure.
- b) Lift out inner packing material.
- c) Lift food warmer out of carton.
- d) Be careful not to discard the information packet enclosed with the warmer.

NOTE: "ABOUT DAMAGED GOODS"

1. If these goods are damaged in transit, the Delivering Transportation Company is required by law to make notation of damages on your paid freight bill.

2. If in your opinion there may be concealed damage, the Delivering Transportation Company is obliged to make inspection AFTER goods are unpacked. Carton must be opened for concealed damage as soon as possible. SAVE CARTON AND INTERIOR PACKING MATERIAL.

3. Transportation rates are made in proportion to damage liability. Therefore, the Carrier (not the Shipper) should be charged with any loss or damage, any claim should be filed with the Delivery Transportation Company.

- f) In the event the buzzer should sound:
Turn the food warmer OFF.
Remove the insert pan.
Refill the well with the proper amount of 160 F (HOT) WATER.
Reinstall the inset pan.
Turn power switch back ON.

- g) At the end use turn power switch OFF.

Cleaning (2)

CAUTION: Unplug the warmer before cleaning.

Pour any remaining water out of the well. Wipe the exterior case and the well with a DAMP cloth or sponge wrung out of hot detergent water solution to remove food residue. Rinse using a clean DAMP cloth and wipe dry.

NOTE: DO NOT IMMERSE THE WARMER OR USE EXCESSIVE WATER WHEN WASHING. DAMAGE TO ELECTRICAL COMPONENTS WILL RESULT.

SECTION IV

IN CASE OF FIRE

- a) Unplug warmer or turn branch circuit disconnect OFF.

SECTION V

FUSING

This warmer draws 4.0 amps at 120 Volts. Be sure the circuit to which it will be connected is adequately wired and fused to accept this added load.

SECTION VI

PREVENTIVE MAINTENANCE

Observe well for lime build-up. Remove as necessary. Lime will affect the performance of your unit.

PURPOSE OF EACH ELECTRICAL COMPONENT

ON/OFF SWITCH: Turn on power to device. Signal light glows to show power is on.

OPERATING THERMOSTAT: (Thermo Disc Type) Cycles heating unit on and off to maintain an average temperature of 170 (filled with water to water level mark in well).

HEATING UNIT: Offers heat to bottom of well.

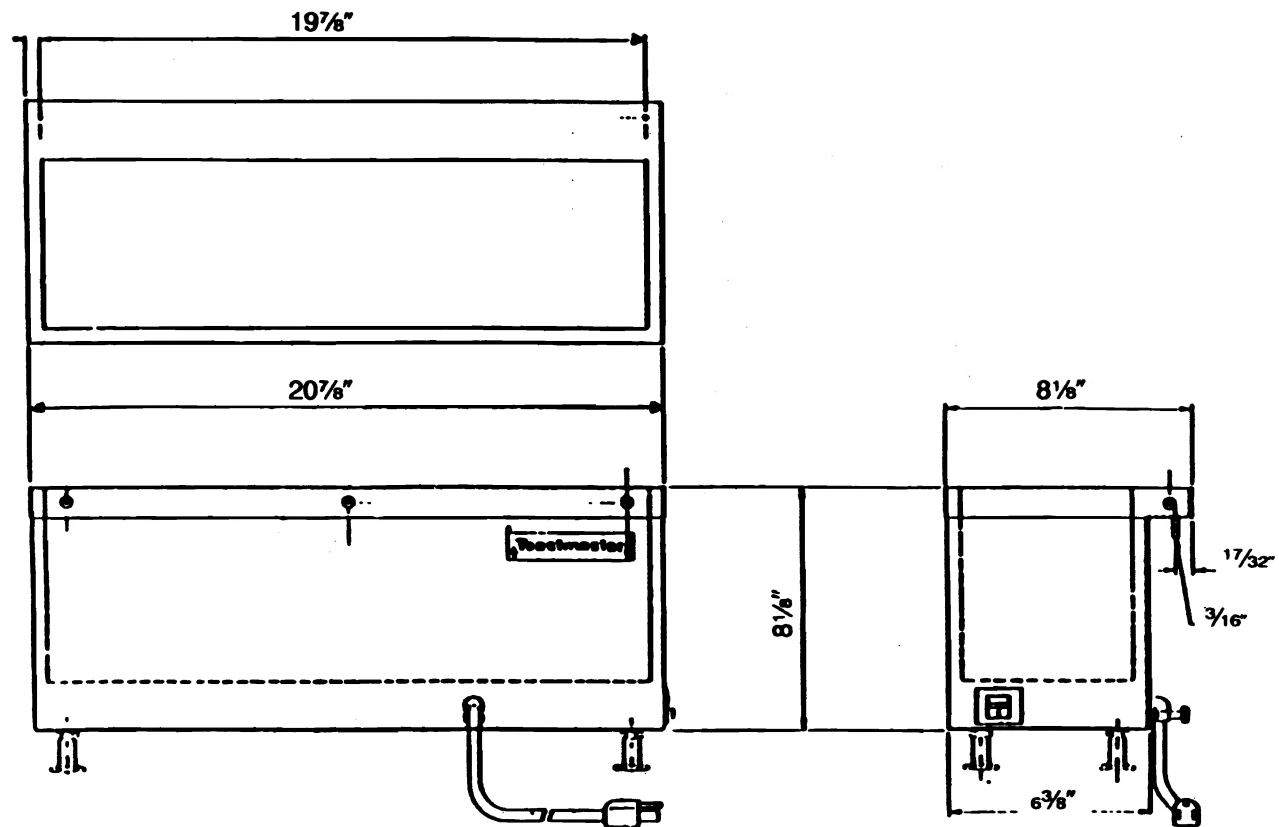
HI-TEMPERATURE THERMOSTAT: (bi-metal Type) turns buzzer on when water boils .

AUDIBLE BUZZER: Signals operator to fill well with water immediately.

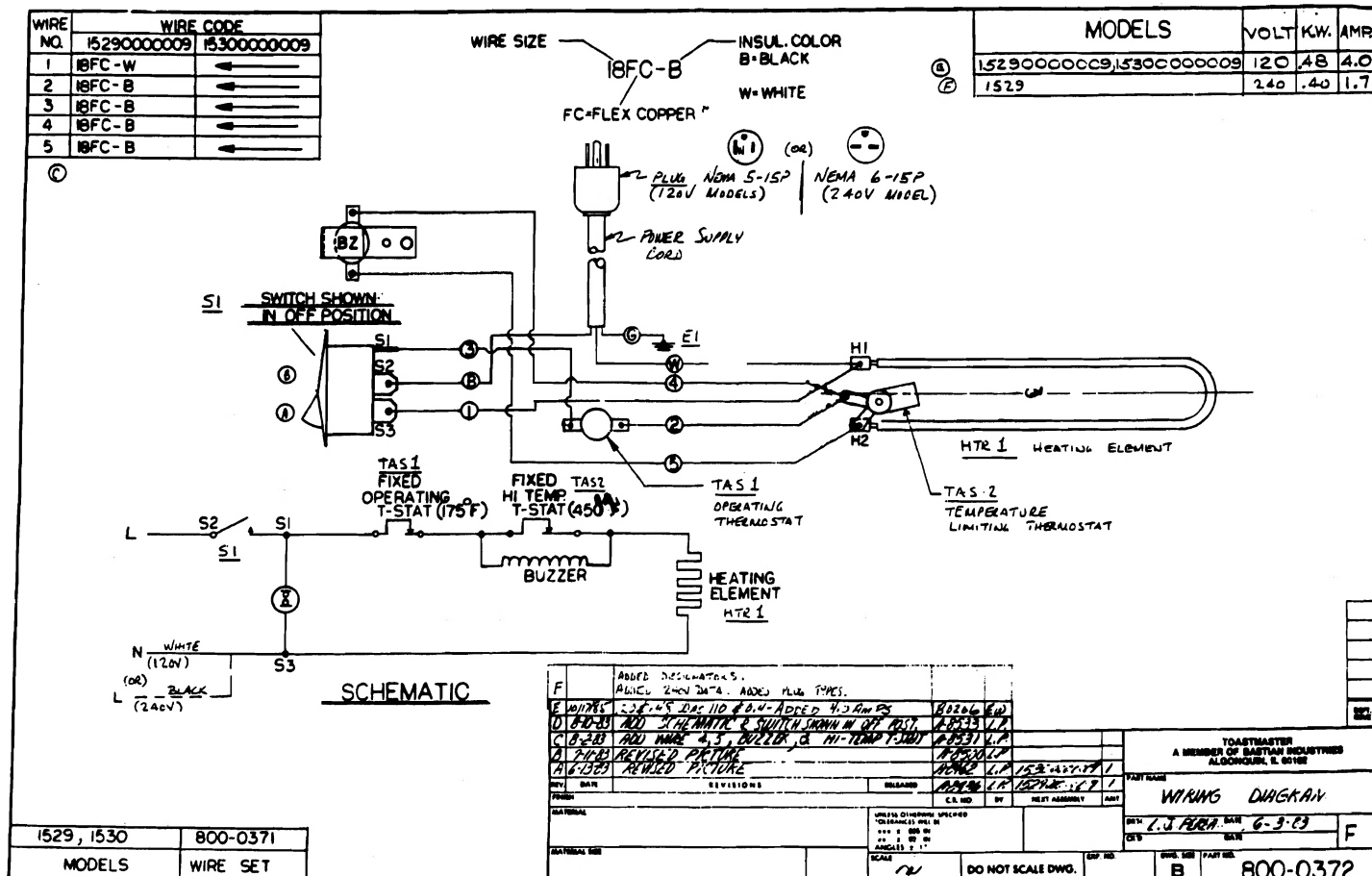
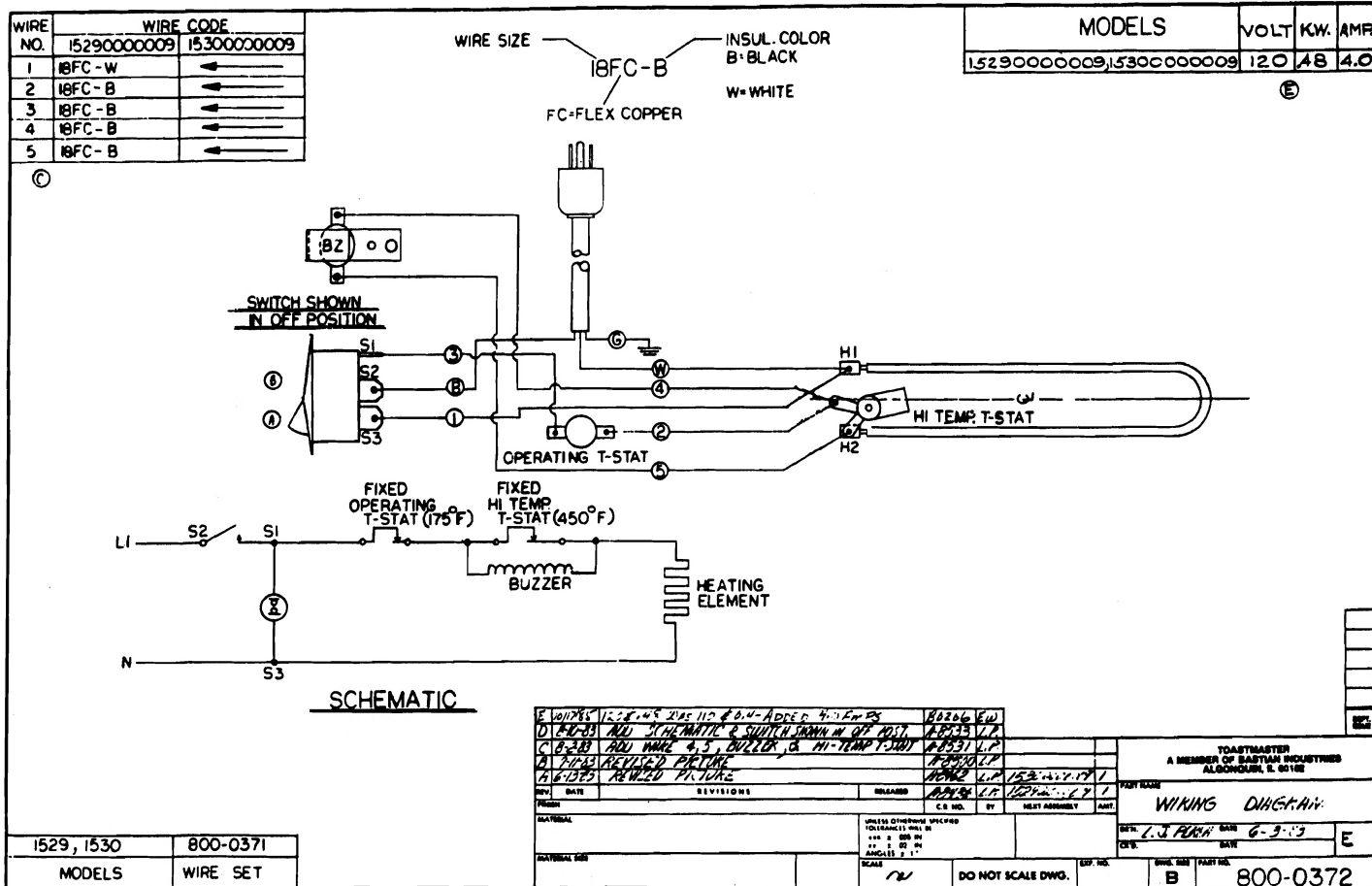
TROUBLE SHOOTING INFORMATION

DURING NORMAL OPERATION (WATER IN WELL)

Symptom	Possible Cause
1. No Signal Light No Heat No Buzzer	No incoming power. Switch Defective. Wire off.
2. No Signal Light Heats	Switch light defective.
3. Signal Light Glows No Heat	Wire off. Heating unit defective. Operating thermostat defective.
4. Signal Light Glows Buzzer Sounds	Hi-temperature thermostat defective
ABNORMAL OPERATION (NO WATER IN WELL - EVAPORATED DRY)	
Symptom	Possible Cause
1. Signal Light Glows No Buzzer	Buzzer defective. Hi-Temperature thermostat defective.



ELECTRICAL DATA		
VOLTAGE	TOTAL KW	AMPS (Single Phase)
120V	.4	3.3
240V	.4	1.7



For more information on the complete line of
Toastmaster® products, contact your Food
Service Equipment Dealer, or write to us at the
address below.

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